No

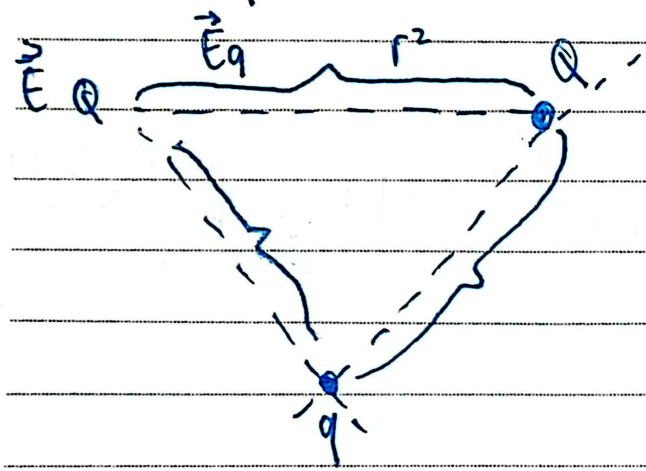
Date

Listrik Statis

- Medan magnet adalah daerah di sekitar magnet atau arus listrik dimana gaya magnet dapat dirasakan medan magnet mempengaruhi muatan listrik yang lain.

$$k = \frac{1}{q\pi}$$

$$\vec{E} = \frac{F}{Q} = k\frac{q}{r^2}\vec{r}_0$$



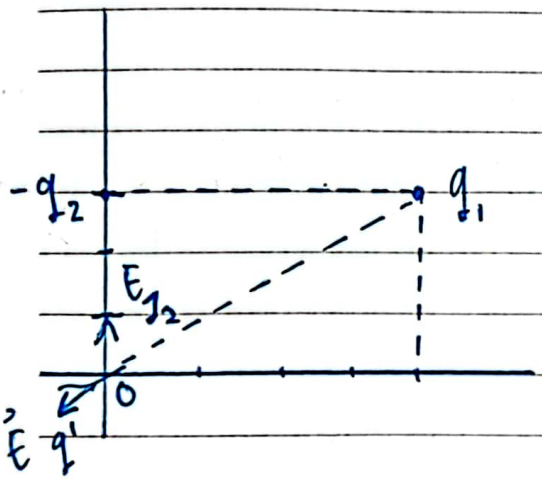
$$\vec{E}_P = \vec{E}_Q + \vec{E}_q$$

$$= k\left(\frac{q}{r^2}\vec{r}_{01} + \frac{Q}{r^2}\vec{r}_{02}\right)$$

LISTRIK MAGNET

No Senin, 17 feb 2025
Date

Contoh:

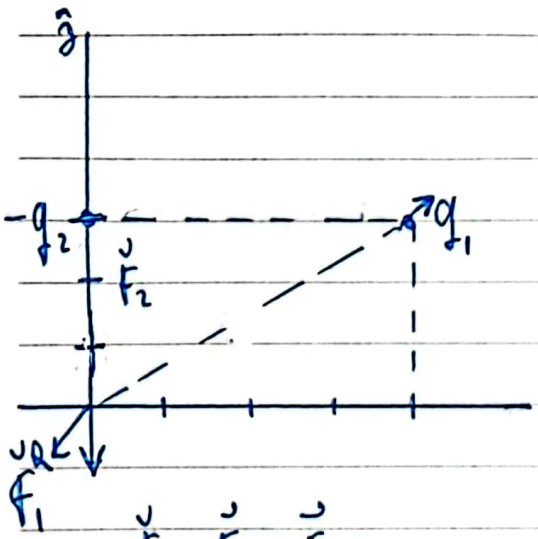


$$\vec{E}_{(0)} = k\left[\frac{q_2}{3^2}(\hat{j}) + \frac{q_1}{5^2}\left(\frac{-4\hat{i}-3\hat{j}}{5}\right)\right]$$

$$= k\left[-4\frac{q_1}{125}\hat{i} + \left(\frac{q_2}{9} - \frac{3}{125}\right)\hat{j}\right]$$

$$|\vec{E}| = \sqrt{(\ )^2 + (\ )^2}$$

$\vec{E}$ dititik o ?



$$\vec{F}_Q = kQ\left[\frac{q_2}{3^2}(-\hat{j}) + \frac{q}{5^2}\left(\frac{4\hat{i}+3\hat{j}}{5}\right)\right]$$

$$\vec{F} = \vec{F}_1 + \vec{F}_2$$

$$= kQ\left[\frac{q_2}{3^2}(\hat{j}) + \frac{q_1}{5^2}\left(\frac{-4\hat{i}-3\hat{j}}{5}\right)\right]$$